CLAIMS

1. Hearing aid for improving the hearing ability of the hard of hearing, comprising an array of microphones, the electrical output signals of which are fed to at least one transmission path belonging to an ear, characterised in that means are provided for deriving two array output signals from the output signals of the microphones, the array having two main sensitivity directions running at an angle with respect to one another and each of which is associated to an array output signal, and in that each array output signal is fed to its own transmission path belonging to one ear of a person who is hard of hearing.

2. Hearing aid according to Claim 1, characterised in that the array is mounted on the front of a pair of spectacles.

3. Hearing aid according to Claim 1 or 2, characterised in that the array is mounted on an arm of a pair of spectacles.

4. Hearing aid according to Claim 2, characterised in that each arm of the spectacles is provided with an array of microphones and in that the output signals from said arrays are each fed to the one or, respectively, the other transmission path.

5. Hearing aid according to Claim 1, 2, 3, or 4, characterised in that the means for deriving the array output signals contain a summing device, from the output of which an array output signal can be taken off and to the inputs of which the microphone output signals are fed via a respective weighting factor device.

6. Hearing aid according to Claim 1, 2, 3 or 4, characterised in that the means for deriving the array output signals contain a series circuit of a number of summing devices and weighting factor devices, the outputs of the microphones arranged between the two outermost microphones being connected to the other inputs of the summing devices, which other inputs are not connected to a weighting factor device, in that one of the outermost microphones of the array is connected via a weighting factor device to the input of the summing device associated with the adjacent microphone and in that the input

of a weighting factor device is connected to the output of the summing device of the microphone adjacent to the other outermost microphone, the one input of a summing device being connected to the output of said weighting factor device, the output of the last-mentioned microphone being connected to the other input of the summing device and it being possible to derive an array output signal at the output of the summing device.

7. Hearing aid according to Claim 6, characterised in that the array output signal is derived via a further weighting factor device.

8. Hearing aid according to Claim 5, 6 or 7, characterised in that the weighting factor device comprises a delay device.

9. Hearing aid according to Claim 8, characterised in that the weighting factor device comprises an amplitude-adjustment device.

10. Hearing aid according to Claim 5, 6 or 7, characterised in that the weighting factor device comprises a phase-adjustment device.

11. Hearing aid according to Claim 10, characterised in that the weighting factor device comprises an amplitude-adjustment device.